

REMARKS

Claims 20-25 are all the claims pending in the application. After entry of this amendment, claims 20-25 will be cancelled and new claims 26-32 will be pending.

Support for the new claims may be found primarily in claims 20-25. Additional support may be found at page 6, page 10 (human T cells), and page 13 (specific cytokines) of the specification.

No new matter has been added. Entry of this amendment is earnestly solicited.

I. Reference to Priority

At paragraph 1 of the Office Action, the Examiner requests amendment of the specification to recite the foreign priority information.

In response, Applicants respectfully note that under the current provisions of U.S. patent law and patent rules, reference to priority applications is not required to be recited.

Therefore, Applicants have not amended the specification as requested by the Examiner.

II. Drawings

At paragraph 4 of the Office Action, the drawings are objected to for the reasons noted on Form PTO 948. The Examiner states that revised drawings must be submitted within the time period set forth in the Office Action for reply to the Office Action.

In response, in contrast to the Draftperson's position Applicants assert that each of drawings 3-7 has the required margin of at least one inch of the left side of the drawing.

However, in order to further prosecution of the application, Applicants are submitting herewith revised drawings 3-7 in which the left margin has been increased.

In view of the revised drawings, Applicants respectfully request acknowledgement and approval of the drawings.

III. Rejection of Claims Under 35 U.S.C. §103

At paragraph 6 of the Office Action, claims 20-25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,171,799 in view of Schwarz et al. (1995) as evidenced by U.S. Patent No. 4,956,150 and Johnson (1999).

The Examiner states that the '799 patent teaches a culture device for the culturing of immunosuppressive (suppressor) cells, with an affinity for protein, wherein prior to cell culturing the culture device is coated with an anti-CD3 antibody (OKT3).

The Examiner also states that Schwarz et al. teaches the culture of T cells with the anti-CD2 TS2/18 antibody and that said culture results in inhibitory effects on T cell activation.

The Examiner concludes that it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to combine the two disclosures to arrive at the claimed invention.

While the Examiner admits that the two references do not teach the use of "plastic" culturing devices or that plastic has an affinity for protein, the Examiner cites to the Johnson reference as evidence of plastic culture dishes and the '150 patent as evidence for the affinity of plastic for proteins.

In response, Applicants note the following concerning the teachings of the prior art cited by the Examiner.

The '799 patent discloses a plate ("a culture device") that was first coated with a goat anti-mouse IgG1. To the plate was then added a monoclonal antibody, such as OKT3 (anti-CD3

antibody), and then T cells derived from different sources, thereby activating the T cells (see, e.g., column 31, lines 47-49; column 33, lines 30-53).

Schwarz et al. teaches that T cell activation was either inhibited (using the TS2/18 antibody) or induced (using different anti-CD2 antibody pairs), depending on the antibodies used. It is specifically stated that single anti-CD2 monoclonal antibodies are unable to activate T cells ("are not mitogenic", page 5813, column 2, 18-20), although single antibodies may inhibit T cell activation (see Abstract). In addition, Schwartz et al. discloses that the combination of an anti-CD2 and an anti-CD3 antibody result in inhibition of T cell activation (page 5817, column 1, lines 10-12).

In view of the disclosures of these two references, Applicants assert that the following subject matter is not taught or made obvious:

- Use of one or more anti-CD2 antibody in the activation of immunosuppressive cells. There is not any teaching in either of the two references that one anti-CD2 antibody can be successfully used to induce activation of T cells. Indeed, the disclosure of Schwartz et al. teaches against the use of a single antibody.
- Use of one anti-CD2 antibody and one anti-CD3 antibody in the activation of immunosuppressive cells. As discussed above, Schwartz et al. demonstrates that the combination of these two different antibodies inhibits T cell activation. Thus, Schwartz et al. teaches away from such a combination. Further, as discussed above, Schwartz et al. indicates a minimum of two or more anti-CD2 antibodies are required to induce activation.

In view of this analysis of the prior art, Applicants have amended the claims by canceling claims 20-25, and replacing them with new claims 26-32.

The new claims recite a culture device for inducing activation of immunosuppressive cells using at least one anti-CD2 antibody, or at least one anti-CD2 antibody and at least one anti-CD3 antibody. Applicants assert that the new claims are not taught or made obvious by the

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 20-25 are canceled.

Claims 26-32 are added as new claims.

prior art. Indeed, as is evident from the teachings of Schwartz et al., the prior art teaches against the new claims.

In view of these comments, and the amendments to the claims, Applicants respectfully request reconsideration and withdrawal of this rejection.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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